

Amendments to Claims

Kindly amend claims 11-13, 21, and 24-25, as indicated in the following complete listing of claims:

Listing of Claims

1. (withdrawn).
2. (previously presented) The method of claim 3, further comprising the step of utilizing spleen cells from the host of step (b) to generate at least one monoclonal, motif-specific, context-independent antibody.
3. (previously presented) A method for producing a motif-specific, context-independent antibody that specifically binds a recurring, modified motif in a plurality of peptides or proteins within an organism in which it recurs, said method comprising the steps of:
 - (a) constructing a degenerate peptide library comprising (i) a fixed target motif comprising two to six invariant amino acids including at least one modified amino acid, and, optionally, one or more degenerate amino acid position(s), and (ii) a plurality of degenerate amino acids flanking said motif;
 - (b) immunizing a host with said peptide library to raise a context-independent antibody specific for all or part of said target motif; and
 - (c) isolating antisera from said host, and purifying the motif-specific, context-independent antibody of step (b) from said antisera, said antibody specifically binding said motif in a plurality of peptides or proteins within an organism in which it recurs.
4. (previously presented) The method of claim 3, wherein said modified amino acid is a selected from the group consisting of a phosphorylated amino acid, an acetylated amino acid, a methylated amino acid, and a nitrosylated amino acid.
- 5-10. (cancelled).
11. (currently amended) The method of claim 3, wherein said target motif comprises all or part of a kinase consensus substrate motif ~~or a protein-protein binding motif~~.

12. (currently amended) The method of claim 11, wherein said kinase consensus substrate motif is selected from the group consisting of a MAPK consensus substrate motif, a CDK consensus substrate motif, a PKA consensus substrate motif, an AKT consensus substrate motif, a PKC consensus substrate motif, and an ATM consensus substrate motif, and wherein said protein-protein binding motif is selected from the group consisting of a 14-3-3 consensus binding motif, and a PDK1/bulky-ring consensus docking motif.

13. (currently amended) The method of claim 11, wherein said kinase consensus substrate motif is selected from the group consisting of a PKC Zeta consensus substrate motif, an ABL kinase consensus substrate motif, a CDK5 consensus substrate motif, an insulin receptor consensus substrate motif, a CaMKII consensus substrate motif, a Src kinase consensus substrate motif, a CDC2/CDK2 consensus substrate motif, and a GSK3 kinase consensus substrate motif, and wherein said protein-protein binding is a PI3K-P85 consensus binding motif.

14. (original) The method of claim 3, wherein said target motif is phosphothreonine-X-(R/K) or proline-phosphoserine-proline.

15. (previously presented) The method of claim 3, wherein said peptide library is from 6 to 20 amino acids long.

16. (previously presented) The method of claim 3, wherein said peptide library is from 6 to 14 amino acids long.

17-20. (withdrawn).

21. (currently amended) A motif-specific, context-independent antibody that specifically binds a recurring, phosphorylated motif comprising consisting of (i) two to six invariant amino acids including at least one phosphorylated amino acid, and, optionally, (ii) one or more degenerate amino acid position(s), said antibody specifically binding said motif in a plurality of non-homologous peptides or proteins within an organism in which it recurs.

22. (withdrawn).

23. (previously presented) The antibody of claim 21, wherein said motif consists of all or part of a kinase consensus substrate motif or a protein-protein binding motif.

24. (currently amended) The antibody of claim 23, wherein said kinase consensus substrate motif is selected from the group consisting of a MAPK consensus substrate motif, a CDK consensus substrate motif, a PKA consensus substrate motif, an AKT consensus substrate motif, a PKC consensus substrate motif, and an ATM consensus substrate motif, and wherein said protein-protein

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~~binding motif is selected from the group consisting of a 14-3-3 consensus binding motif, and a PDK1/bulky ring consensus docking motif.~~

25. (currently amended) The antibody of claim 23, wherein said kinase consensus substrate motif is selected from the group consisting of a PKC Zeta consensus substrate motif, an ABL kinase consensus substrate motif, a CDK5 consensus substrate motif, an insulin receptor consensus substrate motif, a CaMKII consensus substrate motif, a Src kinase consensus substrate motif, a CDC2/CDK2 consensus substrate motif, and a GSK3 kinase consensus substrate motif, ~~and wherein said protein-protein binding motif is a PI3K P85 consensus binding motif.~~

26. (original) The antibody of claim 21, wherein said motif is phosphothreonine-X-(R/K) or proline-phosphoserine-proline.

27-45. (withdrawn).